

REMARKS

Reconsideration and withdrawal of the outstanding grounds of rejection are respectfully requested in light of the above amendments and the remarks which follow.

The Examiner has rejected claims 1-6 under 35 U.S.C. 103 as unpatentable over Holter in view of Lemelson.

The Examiner notes Holter's disclosure of a bolt having a head with a flange and a threaded shank. The Examiner acknowledges that Holter fails to disclose or suggest that some portion of the shank and the underside of the flange have an electrically insulating powder composition coating applied thereto, or that the coating has a thickness of from 0.004 to about 0.014 inch; or that the coating remains functional fully tightened and at an electrical potential of about 5000 VDC.

The Examiner relies upon the secondary reference to Lemelson for disclosing a bolt where some portion of the shank and the underside of the bolt head has an electrically insulating composition coating applied thereto with a thickness corresponding to the claimed thickness. The Examiner contends that it would have been obvious to one of ordinary skill in the art to select an electrically insulating powder composition coating and to insure that the coating is functional at an electrical potential of about 5000 VDC.

It is respectfully submitted that the combination of references is insufficient to support a Section 103 rejection.

The principal reference to Holter discloses a vibration reduction assembly for isolating a top cover from a machine. Part of the vibration reduction assembly includes a

plurality of bolts by which the cover is affixed into the machine. It is disclosed that each bolt engages a neoprene washer and a neoprene sleeve to eliminate metal contact.

It is immediately apparent that Holter is not in any way concerned with electrical insulation. Thus, the Examiner's reference to "electrically insulated bolts" in Holter is misplaced. In fact, nowhere in Holter is there any reference whatsoever to electrical insulation. The insulation disclosed in Holter is solely for vibration elimination.

It should be further noted that Holter fails to disclose or teach a flanged bolt head. The bolts in Holter, as illustrated in Figure 4 engages a neoprene washer 22, a flat metal washer 23 and a neoprene sleeve 24. Clearly, there is no flange in addition to the bolt head itself as required by the claims.

With regard to the secondary reference to Lemelson, there is disclosed the utilization of a thin layer or film of synthetic diamond material which is intended to enhance the strength and surface characteristics, insulating ability and resistance to heat and chemical corrosion attack of the bolt itself. Lemelson does disclose that the diamond coating can cover select portions of the fastener to the exclusion of one or more of the other surfaces thereof.

Lemelson notes only in passing that in certain instances, the coating may insulate the fasteners "electrically." Clearly, Lemelson does not relate to a high voltage electrical insulation application. Moreover, it is suggested that the diamond coating may be covered with a thin layer of protective metal, alloy, oxide, nitride or carbide of such metals as chromium, vanadium, aluminum, titanium, molybdenum or other metal plated or vapor deposited against the outer surface of the diamond coating. The insulation

properties in Lemelson are only for protection against electro-chemical corrosion, and the methods of application are not conducive to good high voltage electrical insulation properties.

In addition, neither Holter nor Lemelson utilize powder coating technology, and in fact, neither diamond nor neoprene can be applied utilizing such technology.

In addition to the above, neither reference discloses or suggests a coating that remains functional fully tightened and at an electrical potential of about 5000 VDC (claim 3, claim 6).


In summary, the combined teachings of the references fails to disclose or suggest an electrically insulated bolt having a flanged head (or integral flange, claim 4) having an electrically insulating powder composition coating applied thereto (claim 1); where the coating remains functional fully tightened at an electrical potential of about 5000 VDC (claim 3). For the Examiner to merely conclude that one of ordinary skill in the art would have arrived at the claimed invention from a consideration of Holter and Lemelson is a classic instance of the utilization of impermissible hindsight. Moreover, the Examiner has failed to explain why or how one of ordinary skill in the art would apply the teachings of Lemelson to Holter and in this regard, the application of a diamond coating to the bolt 20 would appear to be contrary to Holter's objective of providing a vibration isolation assembly. In other words, on what basis would one of ordinary skill in the art have determined to add a layer of synthetic diamond material to a bolt engaging a neoprene washer and a neoprene sleeve?

Accordingly, it is respectfully submitted that claims 1-6 patentably define over the applied prior art, and applicant therefore requests that the application be passed to issue.

Should any small matters remain outstanding, the Examiner is encouraged to telephone the undersigned so that the prosecution of this application can be expeditiously concluded.

Respectfully submitted,

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